

U.S. Patent Application Serial No. 09/660,439

Amendment dated **June 4, 2003**

Reply to OA of **October 3, 2003**

REMARKS

The applicants respectfully submit that no new matter has been added. It is believed that this Amendment is fully responsive to the Office Action dated June 4, 2003.

The Examiner now relies on a new reference (namely, British Patent Publication No. 2 347 014 (hereinafter, the "British Patent Publication") in setting forth the outstanding obviousness rejection discussed below.

Claims 1 - 11 and 16 - 21 stand rejected under 35 USC §103(a) based on Baliga (U.S. Patent No. 5,998,833) and Sapp (U.S. Patent No. 6,351,018), and further in view of the British Patent Publication. The applicants respectfully request reconsideration of this rejection.

In the Preliminary Amendment filed on March 13, 2003, the following structural arrangements of the applicants' MOSFET, as illustrated in the applicants' Figure 2, were highlighted:

(1) the applicants' source electrode film 29 is contiguous (i.e., continuous), while the oxide layer 22a and the electrically insulating region 28 that are above and on the side portion of the source region 18, as illustrated in Baliga's Figure 4H are not contiguous or continuous; and

U.S. Patent Application Serial No. 09/660,439
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(2) the applicants' contiguous or continuous source electrode film 29 occupies the entire opening of the trench 18, as illustrated in the applicants' Figure 2.

Based on the above arguments, the applicants thereafter further amended, in the last Amendment of March 13, 2003, independent claims 1 and 11 in the following manner:

 said source electrode film being contiguous and extending from an upper portion of said source region and a side surface of said source region; said contiguous source electrode film covering an opening of said trench in its entirety.

Moreover, the applicants have added independent claims 20 and 21 in order to highlight the fact that the claimed transistor includes a plurality of trenches, wherein the claimed source electrode film covers the openings of the claimed trenches in their entireties.

See, the third full paragraph, page 7, and second full paragraph, page 8 of our March 13, 2003 Preliminary Amendment.

U.S. Patent Application Serial No. 09/660,439

Amendment dated June 4, 2003

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In response, the Examiner has now taken the position that the applicants' claimed "contiguous source electrode film covering an opening of said trench in its entirety" is shown in Baliga's Figure 3 and Figure 2 of the British Patent Publication.¹

Moreover, the Examiner has taken the positions that the applicants' "plurality of trenches" is shown in Sapp's Figures 2 - 4 or Figure 2 of the British Patent Publication), and that the applicants' "contiguous source electrode film covering a plurality of opening of said trenches in their entireties" is illustrated in Figure 2 of the British Patent Publication.²

In response, first, the applicants respectfully submit that the priority date of the applicants' Japanese Priority Application No. 11-258687 is September 13, 1999, which pre-dates the publication date (August 23, 2000) of the British Patent Publication.

As such, the applicants respectfully submit herewith a verified translation of the applicants' Japanese Priority Application; thereby, making the British Patent Publication an ineffective reference. By making the British Patent Publication an ineffective reference, the Examiner's suggested combination of references necessarily becomes ineffective.

¹See, lines 12 - 14, page 5 of the outstanding Action.

²See, lines 1 - 4, page 6 of the outstanding Action.

U.S. Patent Application Serial No. 09/660,439
Amendment dated **June 4, 2003**
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Secondly, with respect to the Examiner's reliance on Baliga's Figure 3 for, according to the Examiner, teaching the applicants' claimed source electrode film being contiguous and covering an opening of the claimed trench in its entirety, the applicants respectfully submit that Baliga's Figure 3 shows a source electrode 128b, which does not contact "said source region exposed at least on the side surface of said trench" as claimed by the applicants.

In view of the above, the withdrawal of the outstanding obviousness rejection under 35 USC §103(a) based on Baliga (U.S. Patent No. 5,998,833) and Sapp (U.S. Patent No. 6,351,018), and further in view of the British Patent Publication is in order, and is therefore respectfully solicited.

If, for any reason, it is felt that this application is not now in condition for allowance, the Examiner is requested to contact the applicants' undersigned attorney at the telephone number indicated below in order to arrange for an interview to expedite the disposition of this case.

In the event that this paper is not timely filed, the applicants respectfully petition for an appropriate extension of time. Please charge any fees for such an extension of time and any other fees which may be due with respect to this paper, to Deposit Account No. 01-2340.

Respectfully submitted,

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Atty. Docket No. **001155**



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Enclosure: Verified Translation of Japanese Priority Application No. 11-258687.